

**Selection of petroleum distillates for Dr. Carter's architectural coatings research -****TOP 3 CANDIDATES FOR CHAMBER TESTING (in alphabetical order)**

CHEMICAL	ASTM DESIGNATION	DESCRIPTION	ASTM Distillation Range (°F)	ARB Bin #
Odorless Mineral Spirits	D235, Type III C-1	0-0.25% maximum aromatic, full distillation range, odorless, low olefins	300-415	12
Stoddard Solvent (15-20% Aromatic Mineral Spirits)	D235, Type 1A	8-22% aromatics, full distillation range (300-415F)	300-415	15
V M & P Naphtha	D3735, Type IV	0-2% aromatic content, minimum flash point of 40 deg F	235-310	6

**MIDDLE TIER (RRAC will select up to 3 candidates from this list for next phase of tests)**

CHEMICAL	ASTM DESIGNATION	DESCRIPTION	ASTM Distillation Range (°F)	ARB Bin #
7% Aromatic Mineral Spirits	D235, Type IB	2-8% aromatics, full distillation range	300-415	14
Aromatic 100	D3734, Type I	362F maximum dry point, 95% minimum aromatic content (mostly C9's)	300-355	22
Aromatic 150	D3734, Type II	420F maximum dry point, 95% minimum aromatic content (mostly C10's)	350-420	23
D60 (142 Flash) Mineral Spirits	D235, Type IIC	0-2% aromatic content, high flash point (142F minimum)	350-415	11
Low Aromatic Mineral Spirits	D235, Type 1C	0-2% aromatic content, full distillation range (300-415F)	300-415	11
Mixed Xylenes	D843	10-20% Ethyl Benzene, 80-90% Xylenes	N/A	

**BOTTOM TIER (Ranked Lowest)**

CHEMICAL	ASTM DESIGNATION	DESCRIPTION	ASTM Distillation Range (°F)	ARB Bin #
D80 Mineral Spirits	No ASTM Std.	170F flash point, less than 2% aromatics	N/A	
Heptane	No ASTM Std.	Low aromatic, C7 isomers	N/A	
Short Range Mineral Spirits	D235, Type IVC	0-2% aromatic content, low dry point (365F maximum)	300-365	6